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ACTA 2003/00047

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Setifikaat

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Certificate

PATENT OFFICE

DEPARTMENT OF TRADE
AND INDUSTRY

Hiermee word gesertifiseer dat
This is to certify that

ACTA 2003/00047

The attached documents are true copies of the Form P2, P1, P6 and a Provisional Specification of a South African Patent application No. 2002/02792

In the name of : **VINALLTI (PROPRIETARY) LIMITED**

Filed on the : **10th APRIL 2002**

Entitled : **DISPENSER PARTICULARLY, BUT NOT
EXCLUSIVELY, FOR CIGARETTE
PACKETS**

Geteken te in die Republik van Suid-Afrika, hierdie

PRETORIA

Signed at

in the Republic of South Africa, this

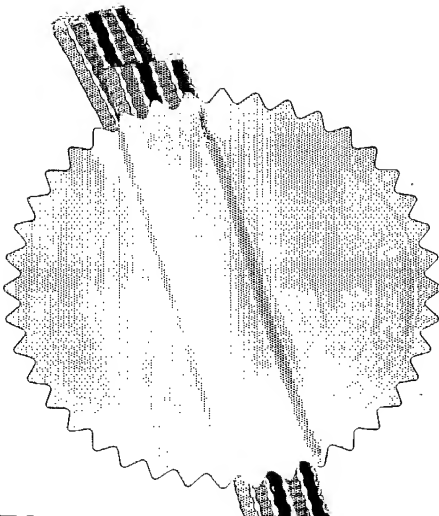
dag van

12th

OCTOBER 2006

day of

Registrateur van Patente
Registrar of Patents



REPUBLIC OF SOUTH AFRICA

PATENTS ACT, 1978

REGISTER OF PATENTS

OFFICIAL APPLICATION NO.		LODGING DATE: PROVISIONAL		ACCEPTANCE DATE	
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INTERNATIONAL CLASSIFICATION		LODGING DATE: COMPLETE		GRANT DATE	
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FULL NAME(S) OF APPLICANT(S) / PATENTEE(S)					
71	VINALLTI (PROPRIETARY) LIMITED				
APPLICANTS SUBSTITUTED				DATE REGISTERED	
71					
ASSIGNEE(S)				DATE REGISTERED	
71					
FULL NAME(S) OF INVENTOR(S)					
72	KLAUS HEINRICH LANZ				
PRIORITY CLAIMED		COUNTRY		NUMBER	
		33		31	
TITLE OF INVENTION					
54	DISPENSER PARTICULARLY, BUT NOT EXCLUSIVELY, FOR CIGARETTE PACKETS				
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74					
PATENT OF ADDITION TO NO.		DATE OF ANY CHANGE			
61					
FRESH APPLICATION BASED ON		DATE OF ANY CHANGE			

REPUBLIC OF SOUTH AFRICA

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APPLICATION FOR A PATENT AND ACKNOWLEDGMENT OF RECEIPT

(Section 30(1) Regulation 22)

THE GRANT OF A PATENT IS HEREBY REQUESTED BY THE UNDERMENTIONED APPLICANT
ON THE BASIS OF THE PRESENT APPLICATION FILED IN DUPLICATE

21	01	OFFICIAL APPLICATION NO	2002-04-10
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BB REF: 0277

REGISTRAR OF PATENTS DESIGNS, TRADE MARKS AND COPYRIGHT	
R50 2002-04-10	R10
REGISTRATEUR VAN PATENTE, MODELLE HANDELSMERKE EN OUTEURSREG	

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54	TITLE OF INVENTION
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DISPENSER PARTICULARLY, BUT NOT EXCLUSIVELY, FOR CIGARETTE PACKETS

☐ THE APPLICANT CLAIMS PRIORITY AS SET OUT ON THE ACCOMPANYING FORM P.2.
(COUNTRY) (DATE) (NO.)

☐

21	01
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 THE APPLICATION IS FOR A PATENT OF ADDITION TO PATENT APPLICATION NO

☐

21	01
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 THIS APPLICATION IS A FRESH APPLICATION IN TERMS OF SECTION 37 AND BASED ON APPLICATION NO

THIS APPLICATION IS ACCOMPANIED BY:

- ☒ 1. A single copy of a provisional or two copies of a complete specification of 11 pages
- ☒ 2. Drawings of 8 sheets
- ☐ 3. Publication particulars and abstract (Form P.8 in duplicate).
- ☐ 4. A copy of Figure of the drawings (if any) for the abstract.
- ☒ 5. An assignment of invention
- ☐ 6. Certified priority document(s). (State number)
- ☐ 7. Translation of the priority document(s)
- ☐ 8. An assignment of priority rights
- ☐ 9. A copy of Form P.2 and the specification of RSA Patent Application No
- ☒ 10. Form P.2 in duplicate
- ☒ 11. A declaration and power of attorney on Form P.3
- ☐ 12. Request for ante-dating on Form P.4
- ☐ 13. Request for classification on Form P.9
- ☐ 14.

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DATED THIS 9th DAY OF April 2002

BRIAN BACON & ASSOCIATES
APPLICANTS PATENT ATTORNEYS

The duplicate will be returned to the applicant's address for service as
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RECEIVED OFFICIAL DATE STAMP 2002-04-10	
REGISTRATEUR VAN PATENTE, MODELLE, HANDELSMERKE EN OUTEURSREG	

BRIAN BACON & ASSOCIATES
PATENT ATTORNEYS
CAPE TOWN

REPUBLIC OF SOUTH AFRICA
Patents Act, 1978

PROVISIONAL SPECIFICATION

(Section 30 (1) – Regulation 27)

21	01	OFFICIAL APPLICATION NO
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2002/2792

22	LODGING DATE
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2002-04-11

71	FULL NAME(S) OF APPLICANT(S)
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VINALLTI (PROPRIETARY) LIMITED

72	FULL NAME(S) OF INVENTOR(S)
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KLAUS HEINRICH LANZ

54	TITLE OF INVENTION
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DISPENSER PARTICULARLY, BUT NOT EXCLUSIVELY, FOR CIGARETTE PACKETS

FIELD OF THE INVENTION

THIS INVENTION relates dispensers particularly, but not exclusively, for cigarette packets.

BACKGROUND TO THE INVENTION

Various factors, such as restrictive legislation and the need to make the best possible use of space in retail outlets, has given rise to a need for a dispenser which can not only store a number of packets but can also display the front face of at least one packet and dispense packets one at a time to customers.

10 The present invention seeks to provide a dispenser which will store packets and dispense them one at a time. It also seeks to provide, as a subsidiary feature, a dispenser in which at least one packet's front face is displayed for advertising purposes.

BRIEF DESCRIPTION OF THE INVENTION

15 According to one aspect of the present invention there is provided a dispenser for dispensing packets particularly, but not exclusively cigarette packets, said device comprising a magazine for holding a plurality of packets standing in an upright position, means for pushing the plurality of packets towards a dispensing end of the

magazine, means for lifting the leading packet of the plurality upwards out of the magazine, a dispensing column up which said lifting means pushes the packet being lifted, and means for supporting a packet that has been lifted in said column to prevent the packet from dropping down said column.

5 The column can have a closure cap at the upper end thereof, a packet being lifted in the column pressing on the cap to lift it and permit that the packet to emerge from the upper end of the column.

 Said means for pushing the packets forward in the magazine can comprise a pressure plate and a spring. The spring is preferably an elongate leaf
10 spring which is wound to coil form, the inner end of the wound coil being fixed and the outer end of the coil being attached to the pressure plate.

 Said lifting means can comprise a lever structure which is pivotally mounted at one end and which has a platform at the other end, there being means for swinging said lever structure in an upward arc so that said platform bears on the
15 underside of a packet to be lifted.

 The means for swinging the lever structure in an upward arc can comprise a rotatable cam with lobes one of which, each time the cam rotates, bears on the underside of said lever structure to lift said structure.

-4-

Said lever structure can be in the form of a parallelogram linkage so that said platform moves vertically.

According to a further aspect of the present invention there is provided dispensing apparatus comprising a first compartment having a top surface on which a cash register can stand, a second compartment which is vertically elongate, one end of the first compartment communicating with the lower end of the second compartment, a plurality of dispensers as defined above in said compartments, said magazines being side-by-side in the first compartment and said columns being side-by-side in the second compartment.

The second compartment, on the side thereof remote from the first compartment, can have a transparent window so that packets in the columns in the second compartment are visible from outside the dispensing apparatus.

BRIEF DESCRIPTION OF THE DRAWINGS

For a better understanding of the present invention, and to show how the same may be carried into effect, reference will now be made, by way of example, to the accompanying drawings in which:-

Figures 1 to 6 are side elevations of a dispenser in accordance with the present invention in different operative conditions;

Figure 7 is a pictorial view of the dispenser; and

Figure 8 is a pictorial view of a lockable container.

DETAILED DESCRIPTION OF THE DRAWINGS

Referring firstly to Figures 1 and 7, the dispenser 10 illustrated comprises
5 an upstanding column 12 having a lower section 14.1 and upper section 14.2. The
dispenser also includes a horizontal magazine 16.

The magazine 16 comprises elongate side walls 18 and 20 and is open at
its front end and rear ends. The side walls 18, 20 are bent inwardly along their lower
edges to define a two part base wall 22 with a slot 24 along the centre of it.

10 A pressure plate 26 fits between the side walls 18 and 20. The plate 26 is
shaped to provide two outwardly directed horizontally extending grooves. These
receive the edges of the base wall which bound the slot 24 thereby to hold the pressure
plate in place whilst permitting it to move along the magazine. An elongate spring strip
28 has one end fastened to the lower edge of the pressure plate 26. The other end of
15 the strip 28 is attached to a roller 28.1 (Figure 6) which turns on a fixed spindle (not
shown) and the strip 28 is wound around the roller when the pressure plate is in the
position shown in Figures 1 and 7 of the drawings.

The pressure plate has a finger hole 27 so that it can readily be pulled

back (to the right in the drawings) during loading of the magazine.

Below and to one side of the magazine there is a support structure 30. The structure 30 carries an electric motor 32 which, via a gearbox 34, drives a cam 36 of triangular shape. Pins 38 protrude from the cam 36, there being a pin at each apex of the cam.

A lever 40 forming part of a lever structure 42 is pivotally mounted at 44 on a vertical plate 46 forming part of the support structure 30.

A tie rod 48 is pivotally mounted at 50 on the plate 46, and a rectangular, vertically positioned linking plate 52 joins the lever 40 and the rod 48 at the ends thereof remote from their pivotal mountings. The plate 52 is pivotally connected to both the tie rod and the lever.

The upper edge of the plate 52 forms a platform 54 which extends across the magazine 16 at the forward end thereof.

The lever 40, rod 48, plate 52 and plate 46 form a parallelogram linkage which ensures that the platform 54 moves vertically.

An operating element 56 extends downwardly from the lever 40 and is

pivotally mounted thereon. Guides 56.1 on the plate 46 ensure that the element 56 remains vertical at all times. At the lower end of the element 56 there is a follower 58 which co-operates with the pins 38.

5 The lower section 14.1 of the column is bounded at the front by a wall 60 with a window 62 in it. The section 14.1 is open at the back and closed on one side of a side wall 66. At the other side it is open apart from a strut 64 which extends downwardly from the section 14.2. The lower end of the strut 64 is not fixed.

10 The column part 14.2 comprises a rear wall 68 and side walls 70. The section 14.2 slopes rearwardly and is closed at the top by a spring loaded lid 72 (not shown in Figure 7). The column part 14.2 is open at the front. The upper end of the strut 64 is integral with one of the walls 70. Packet supports 65 protrude forwardly from the rear wall 68.

15 A cross member 67 forms the lintel of the window 62 and has a wire spring 78 mounted on it. The wire spring is of inverted channel shape and has legs 78.1 joined at their upper ends by a cross member 78.2. The spring 78 leans inwardly as best seen in Figure 7.

A micro switch (not shown) is provided adjacent the pins 38. The motor 32 is wired through the micro switch and through a manually operable switch (not

shown) in parallel with the micro switch.

In use of the dispenser the pressure plate 26 is pulled to the rear of the magazine (the right hand end of Figures 1 to 6) and cigarette packets P1, P2, P3, P4 (Figures 2 to 5) are loaded into the magazine. Each packet stands upright with its major faces vertical. The bottom faces of the packets rest on the bottom wall of the magazine.

When the pressure plate 26 is released, the packets are all pushed forward along the magazine. The front packet P1 is in the window 62 with vertical edge zones of its front face pressed against the parts of the front wall 60 which bound the window 62. The leading packet P1 is, when the pusher plate 26 is released and moves forward, slid off the bottom wall of the magazine and onto the platform 54. In the illustrated form the upper section 14.2 is tall enough to hold two packets stacked one on another. These two packets, designated P5 and P6, and the packet designated P1 in the window 62, are visible from outside the dispenser.

When the motor 32 is activated, using the manually operable switch, the cam 36 rotates and the pins 38 all move in arcs. As soon as movement starts the micro switch closes. One of the pins normally holds the micro switch open and the initial movement of the pin which was holding the switch open allows it to close. Thus opening of the manually operable switch does not result in the motor stopping as the

motor is now supplied through the micro switch.

Another of the pins 38 lifts the element 56 and hence swings the entire lever structure 42 in an upward arc (see Figures 3 and 4).

As the platform 54 lifts with the rest of the lever structure 42, the packet P1 is pushed upwards (Figure 3). It lifts out of the lower section 14.1 into the section 14.2 and as it does so it pushes the packets P5 and P6 upwardly. This causes the packet P6 to bear on the underside of the cap and pivot it upwards. This packet now becomes available to the customer. The plate 52 prevents the packet P2, and hence the packets P3, P4 and the pusher plate 26, from moving forward whilst the lever structure is raised. However, as soon as the lever structure drops the packets P2, P3, P4 and the pusher plate 26 move forward (see Figure 5) under the influence of the spring 28.

The upper, forward edge of the packet P1 encounters the vertical legs 78.1 of the spring 78 and its upper end is tilted rearwardly. As said upper forward edge clears the spring's cross member 78.2, the cross member presses on the front face of the packet pushing it against the rear wall 78. This movement ensures that the lower edge of the packet moves to a position over the packet supports 65 and is thus prevented from dropping back into the section 14.1.

The arrangement is such that the pin 38 which lifted the element 56 disengages from it by rotating out from underneath it as the lever structure 42 reaches its upper position. The lever structure thus drops down to the illustrated position. A spring (not shown) which becomes effective just before the lever structure 42 reaches its bottom position, can be provided to pull the structure 42 all the way down. As soon as the lever structure drops, the packets P2, P3, P4 and the pressure plate 26 move forward. The packet P2 is now on the platform 54.

One of the pins 38 at this stage opens the micro switch and the motor 32 is de-energized.

A micro switch (not shown) can be provided which is operated by the packet (P6 as illustrated) as it emerges from the column section 14.2.

A plurality of the dispensers described can be placed side-by-side in a lockable container 100 (see Figure 8). The container 100 has a first compartment 102 for receiving the magazines 16, the first compartment 102 having a top surface 104 on which a cash register (not shown) can stand.

The lower end of a second compartment 106 merges with the front end of the first compartment. The column sections 14.2 stand up in the compartment 106.

The rear wall 108 of the compartment 102 can be in the form of a lockable door.

5 The magazines 16 are mounted as a unit on a fixed rail structure 110, such as is found in filing cabinets which has drawers that slide in and out, and this unit can thus slide out of the compartment 102 for loading purposes (as shown in Figure 6). The magazines and columns are thus not connected to one another but merely come into co-operating relationship as the unit comprising the loaded magazines are slid back into the first compartment 102.

10 Spring clips (not shown) can be provided for latching each pressure plate in the fully retracted position to which it is withdrawn for loading purposes. The door 108 includes cams which bear on and release the spring clips as the door is closed.

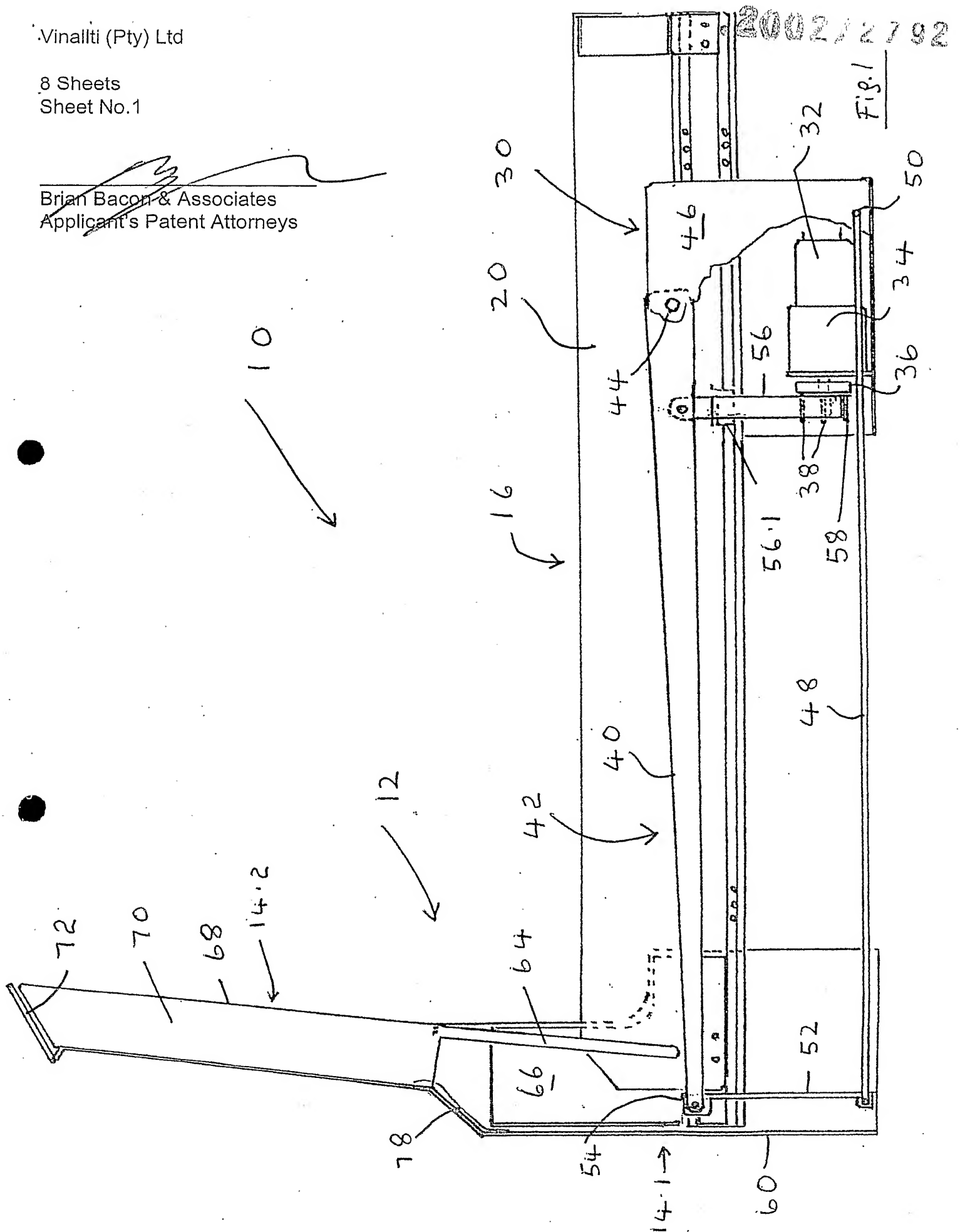
A micro switch (not shown) can be provided adjacent the upper end of the section 14.2 and positioned so that it is operated each time a packet is forced upwardly out of the column section 14.2.

15 Dated this 9th day of April 2002



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Applicant's Patent Attorney

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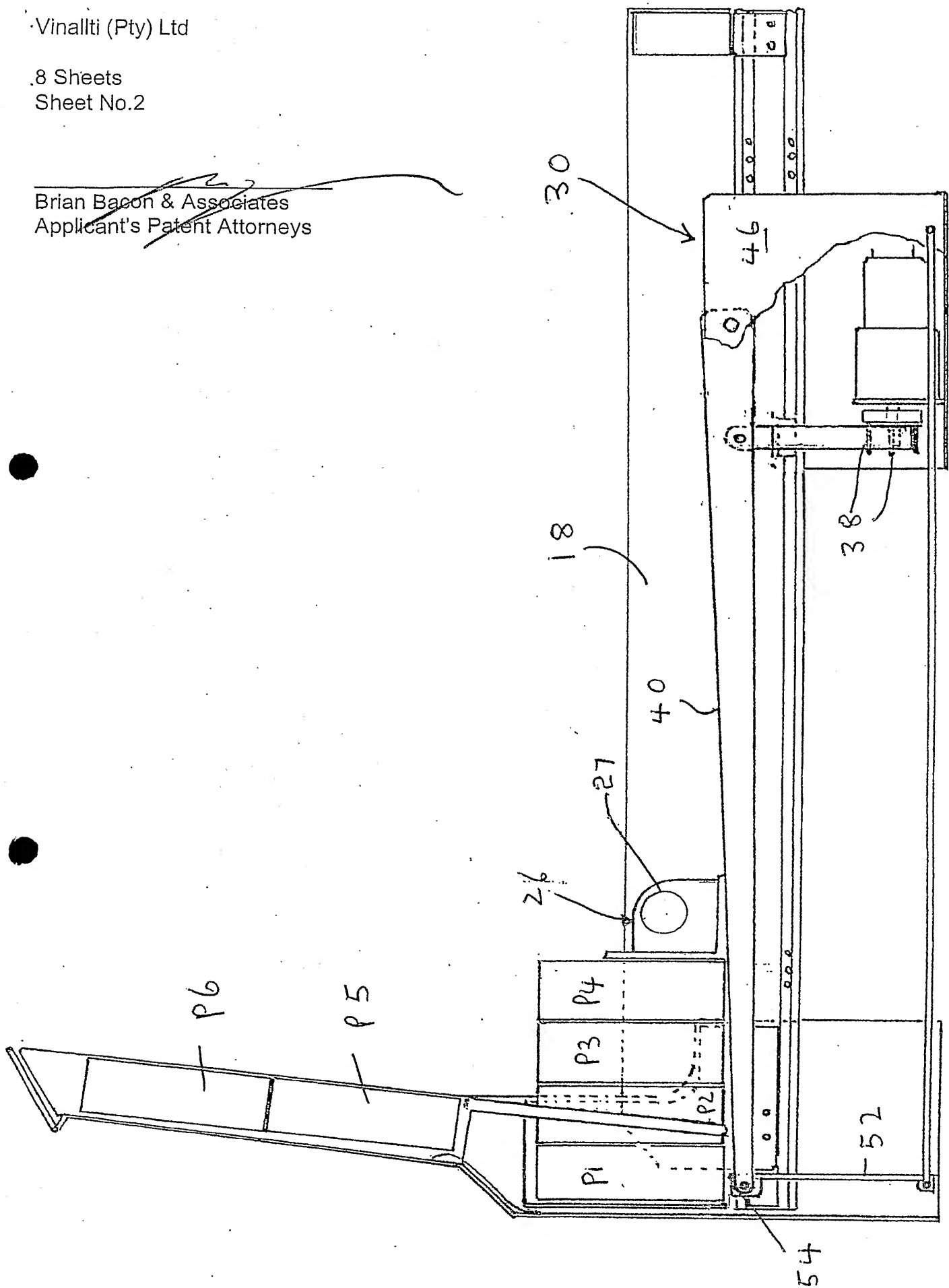


Fig. 2

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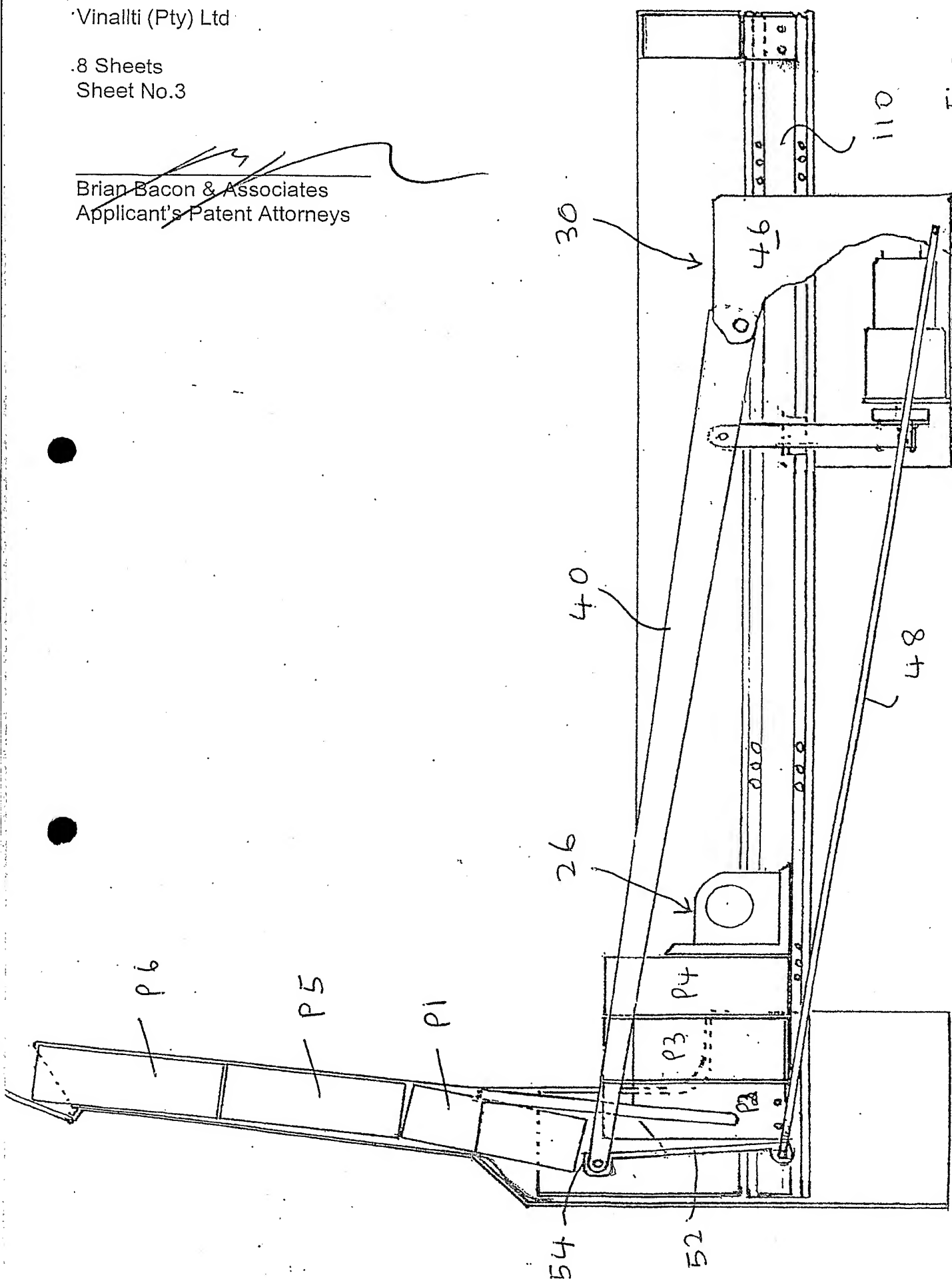


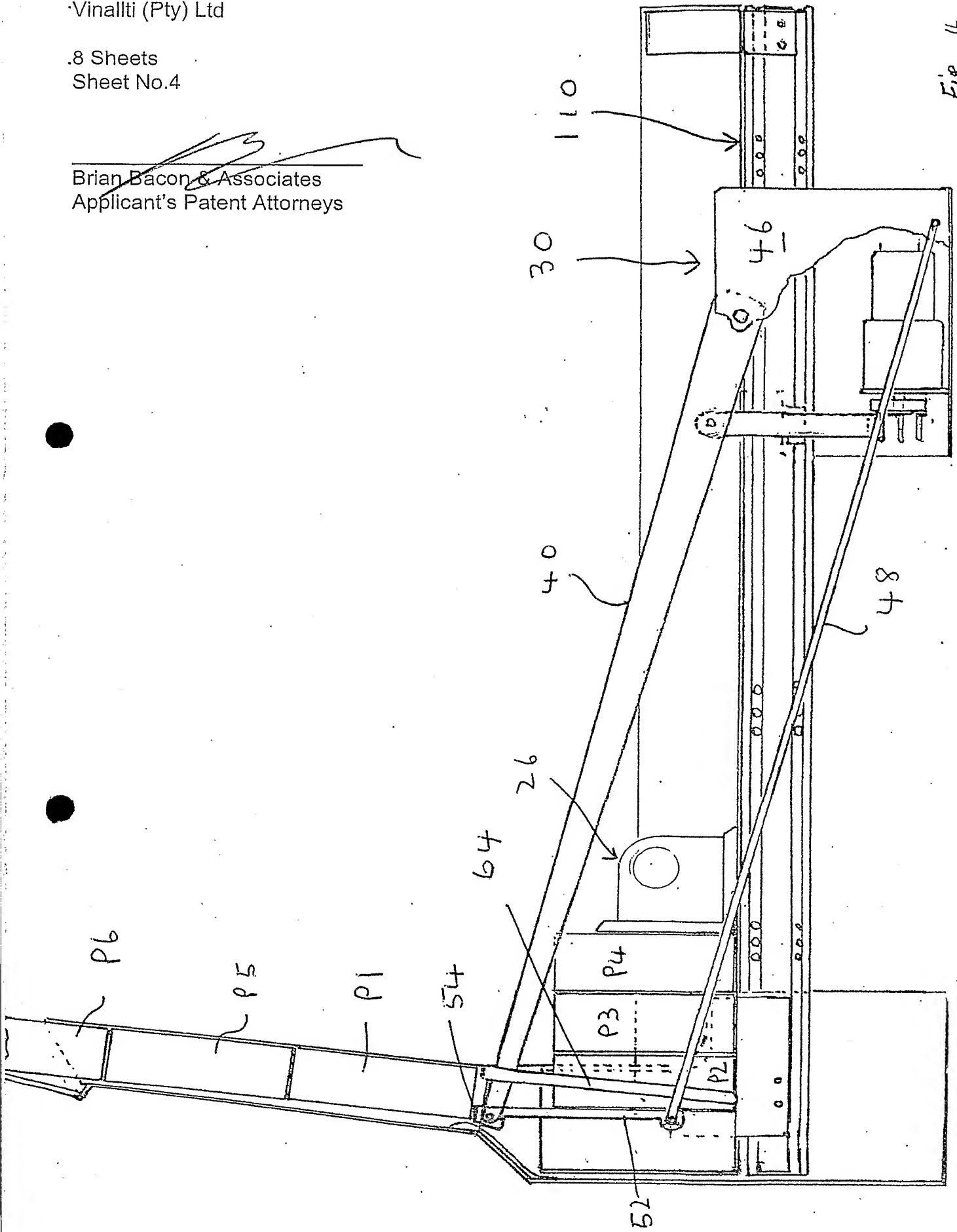
Fig.3

Vinallti (Pty) Ltd

8 Sheets
Sheet No.4

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Fig. 4



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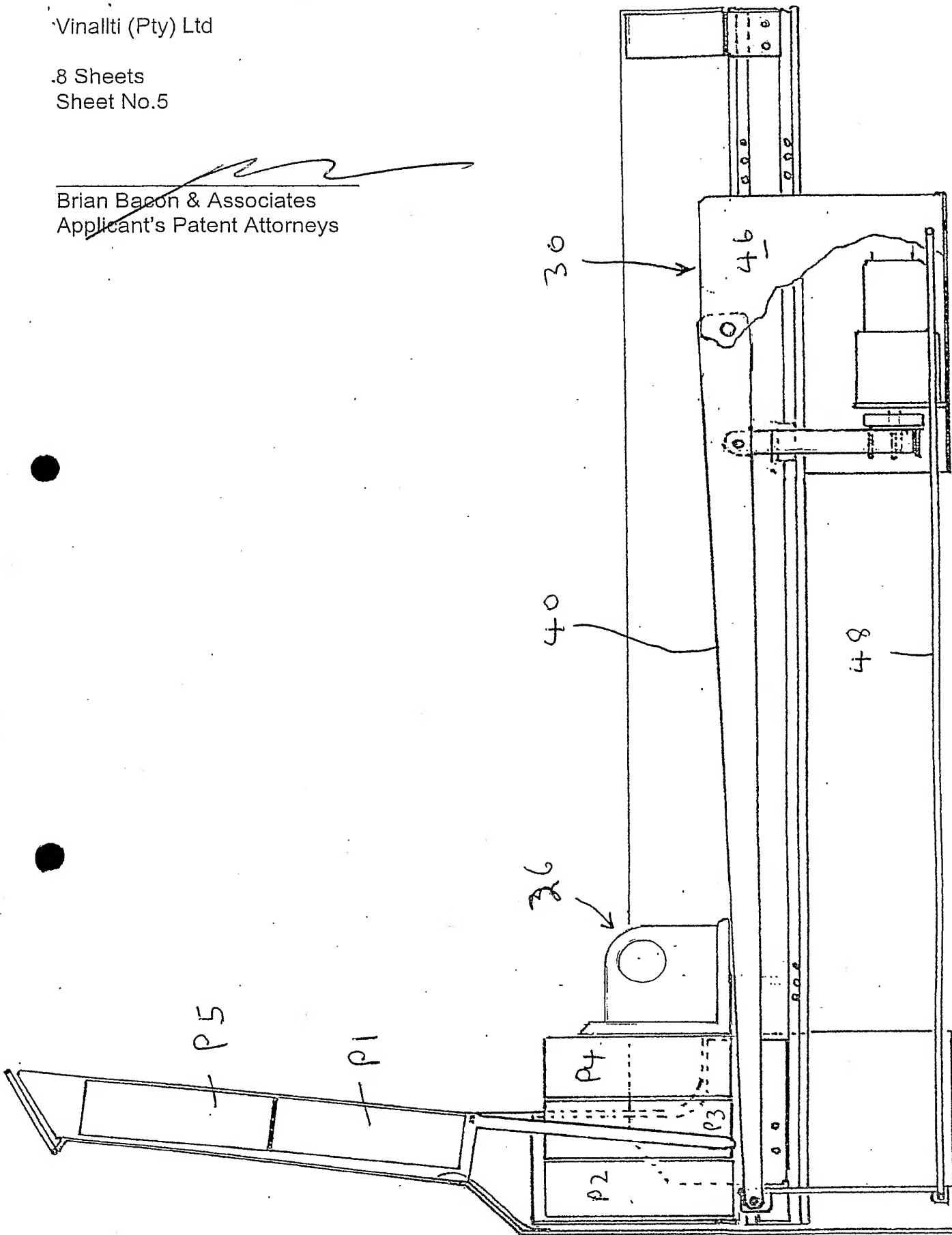


Fig. 5

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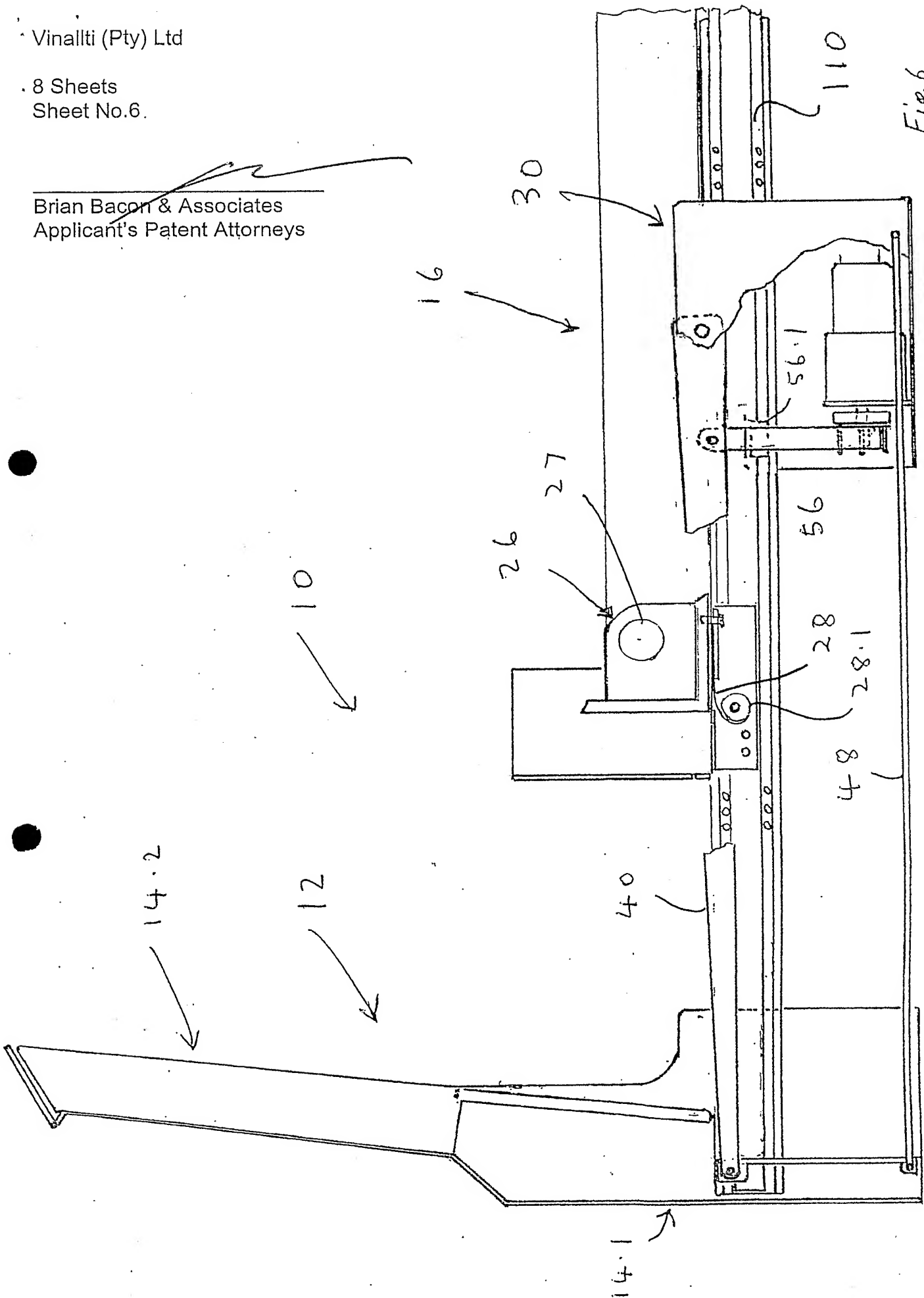
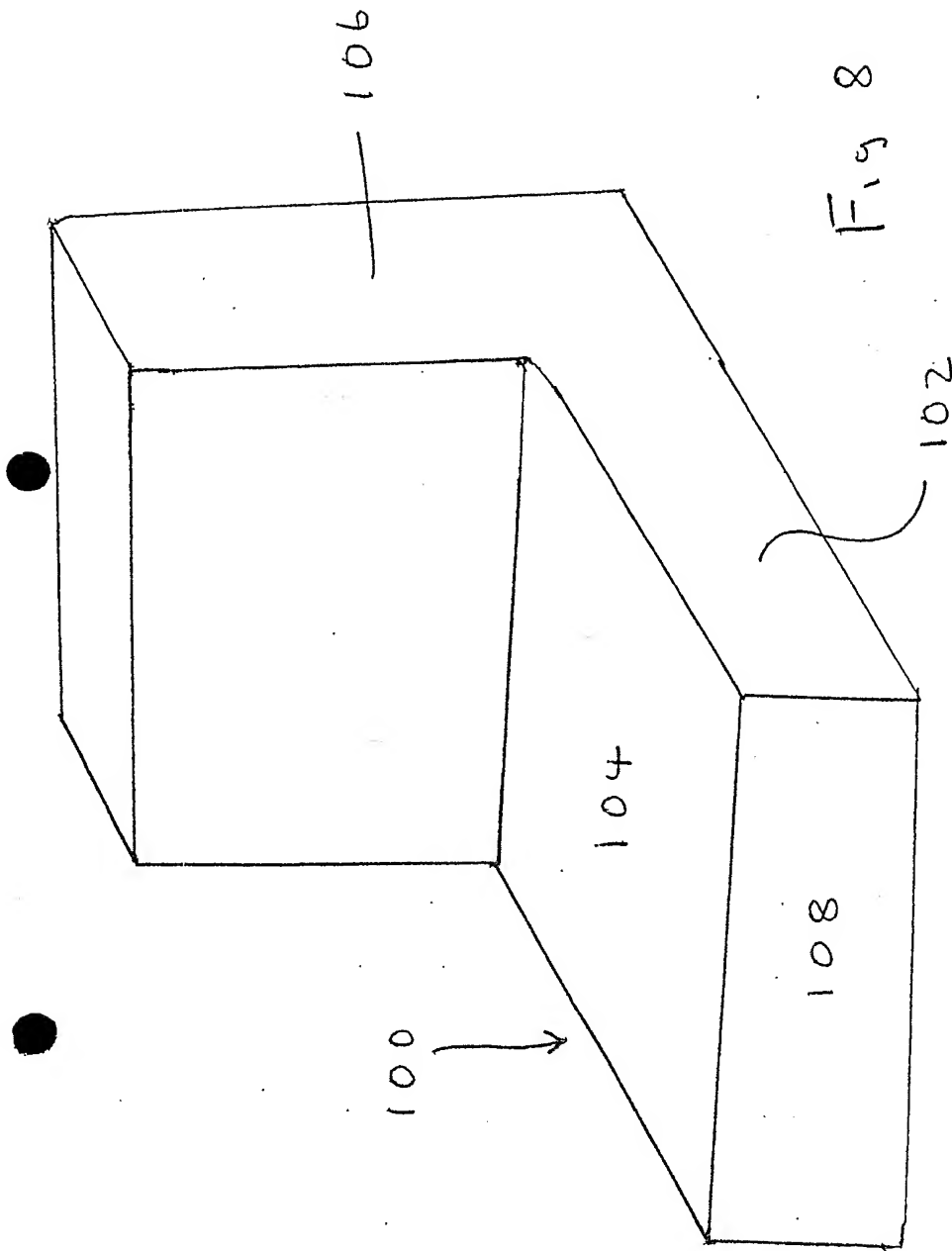


Fig. 6



Fig. 7



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